

Freight Advisory Council (FAC)

December 1, 2017

Brad Hofer

Brad.Hofer@IowaDot.us

Phone: 515-239-1787



Iowa Rest Area Management Plan (IRAMP)



History

- 2012-2013 Rest Area Management Study
 - Data collection on all full service Rest Areas
 - Focus investment on most needed repairs
- 2016 IRAMP Implementation Plan
 - Data consistent with previous data collection
 - Final recommendations for future planning
 - Ranks Rest Areas based on 8 criteria
 - Identifies highly utilized and most critical Rest Areas



The Challenge

- The 5 year program had in the past included spending between \$15-20M for Rest Area improvements
- There was a need to ensure that this was focused in the right areas
- There was a general understanding from our team that this amount of spending was not tenable long term.
- We were asked to investigate whether the number and location of rest areas were appropriate and make recommendations if they were not

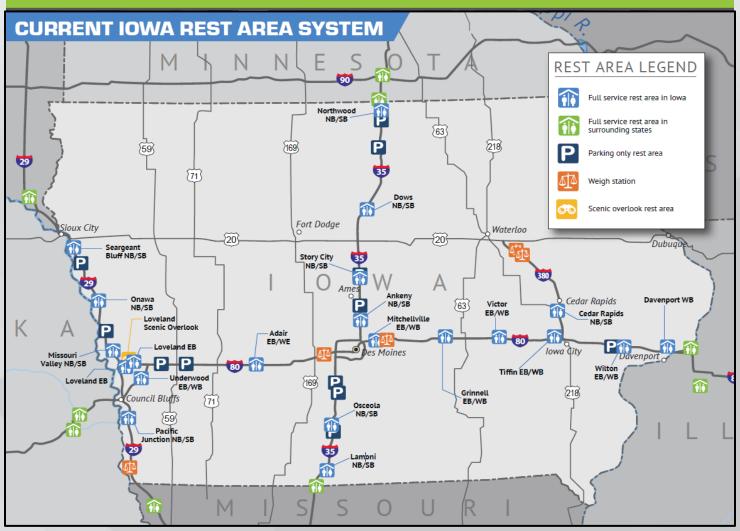


IOWA'S REST AREA SYSTEM











800 Lincoln Way • Ames, IA 51503 • 515-239-1101 • www.lowaDOT.gov



Ranking Criteria







Highest Ranked Rest Areas

TOP 10REST AREAS FOR FUTURE INVESTMENT

Based on composite scoring, this evaluation identified the following rest areas as the 10 highest ranking and most deserving of future investment.

WEIGHTED EVALUATION CRITERIA

- Rest Area Usage
- Rest Area Facility Age
- Rest Area Facility Services
- Rest Area Spacing
- Presence of 24-hour Alternative Service Locations
- Truck Parking Availability
- · Truck Parking Demand
- Uniqueness



Northwood Northbound/ Northwood Southbound

(I-35 Worth County MP-214)

Ranks in the top 10 for 6 of 8 criteria

- #2 for Truck Parking Demand
- #2 for Truck Parking Availability
- #3 for Rest Area Usage



Cedar Rapids Northbound

(I-380 Linn County MP-13)

Ranks in the top 10 for 6 of the 8 criteria #1 for Rest Area Spacing — tied ranking #7 Truck Parking Demand



Dows Northbound/ Dows Southbound

(I-35 Franklin County MP-159)

Ranks in the top 10 for 5 of 8 criteria #1 for Truck Parking Availability



Tiffin Eastbound

(I-80 Johnson County MP-237)

Ranks in the top 10 for 5 of 8 criteria

- #1 for Rest Area Usage
- #3 for Truck Parking Availability
- #5 for Truck Parking Demand



Adair Eastbound/ Adair Westbound

(I-80 Adair County MP-81)

Ranks in the top 100 for 5 of 8 criteria



Davenport Westbound

(I-80 Scott County MP-300)

Ranks in the top 10 for 4 of the 8 criteria

- #1 for Truck Parking Demand
- #7 for Rest Area Usage



Pacific Junction Northbound

(I-29 Mills County MP-38)

Ranks in the top 10 for 2 of 8 criteria #5 for Rest Area Spacing



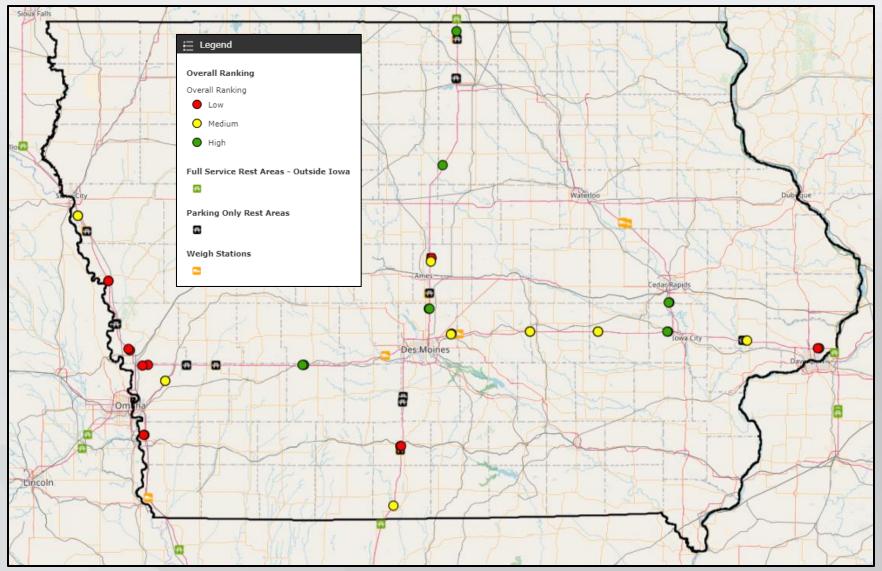


Lowest Ranked Rest Areas

Rest Area Location	Justification for Receiving Least Amount of Future Investment
Davenport Eastbound (I-80 Scott	Ranks in the bottom 10 for 5 of the 8 criteria, including last for Rest Area
County - MP 300)	Spacing.
Loveland Eastbound (I-680	Ranks in the bottom 10 for 5 of the 8 criteria, including last for Rest Area
Pottawattamie County – MP 16)	Usage
Loveland Westbound (I-680	Ranks in the bottom 10 for 5 of the 8 criteria, including second to last for
Pottawattamie County - MP 18)	Rest Area Usage
Missouri Valley Northbound (I-29	Ranks in the bottom 10 for 4 of the 8 criteria, and doesn't rank in the top 10
Harrison County - MP 79)	for any of the 8 criteria
Onawa Northbound (I-29 Monona	Ranks in the bottom 10 for 3 of the 8 criteria
County - MP 110)	
Onawa Southbound (I-29 Monona	Ranks in the bottom 10 for 3 of the 8 criteria
County - MP 110)	
Osceola Northbound (I-35 Clarke	Ranks in the bottom 10 for 2 of the 8 criteria, and doesn't rank in the top 10
County - MP 33)	for any of the 8 criteria
Osceola Southbound (I-35 Clarke	Ranks in the bottom 10 for 4 of the 8 criteria, and doesn't rank in the top 10
County - MP 33)	for any of the 8 criteria
Sergeant Bluff Northbound (I-29	Ranks in the bottom 10 for 3 of the 8 criteria, and doesn't rank in the top 10
Woodbury County - MP 139)	for any of the 8 criteria
Story City Northbound (I-35 Story	Ranks in the bottom 10 for 4 of the 8 criteria, and doesn't rank in the top 10
County - MP 120)	for any of the 8 criteria





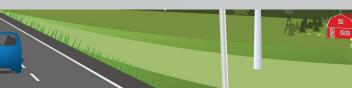


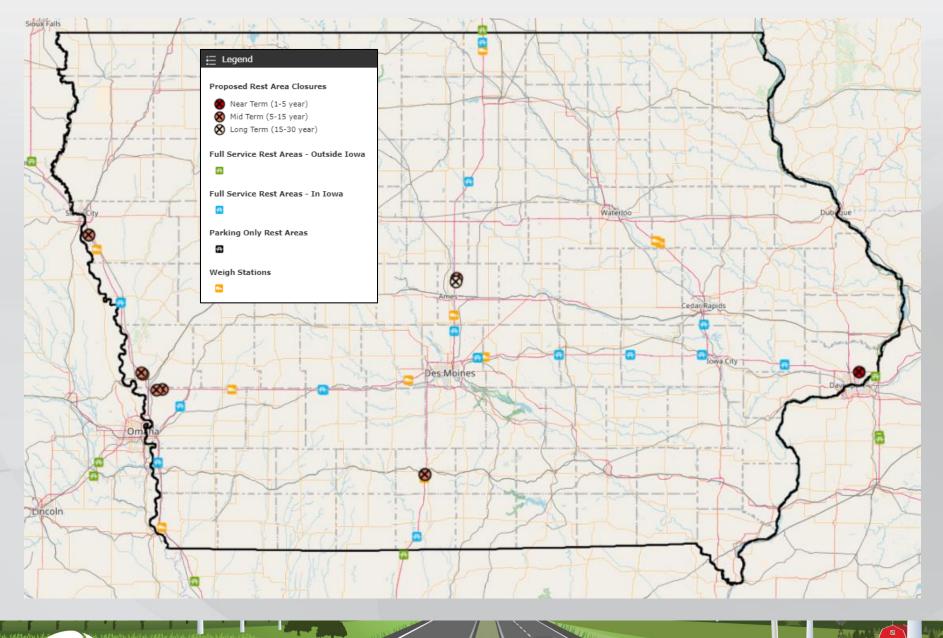


Implementation Recommendations

- Evaluate use of the TPIMS 6-12 months
- Close 1 full service Rest Area and 14 parking only sites in years 1-5
- Close 9 full service Rest Areas and 2 Parking only sites in years 5-15
- Close 1 full service Rest Area in years 15-30
- Implement Truck Parking Mitigation throughout the system

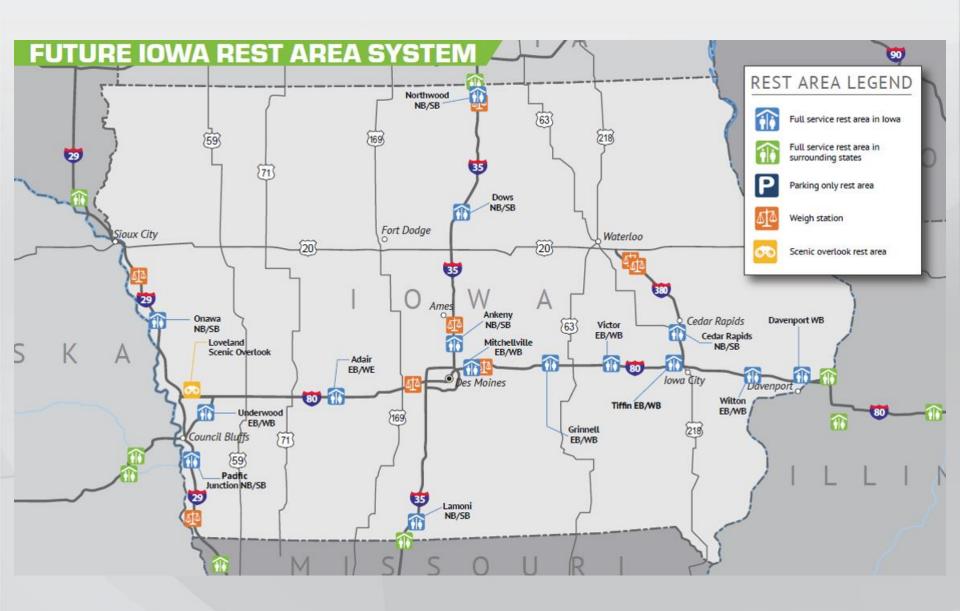






COMADOT SMARTER I SIMPLER I CUSTOMER DRIVEN

800 Lincoln Way • Ames, IA 51503 • 515-239-1101 • www.lowaDOT.gov





800 Lincoln Way • Ames, IA 51503 • 515-239-1101 • www.lowaDOT.gov



Closure Considerations

- The Code of Federal Regulation (23 CFR 752) recommends that the following conditions be reviewed and considered when agencies are considering rest area closures:
 - Size: Remaining rest areas need to be adequate in size and spacing in order to meet the needs of the traveling public
 - Distance: Distances between the remaining rest areas should be reasonable; approximately one hour's drive time or less in spacing without extenuating circumstances
 - Coordination with Adjacent States: Any abandonment should be coordinated as appropriate with adjacent States
 - ROW Funding Credits: Federal funding credit is required with the sale of any rest area right-of-way (ROW)
 - Federal Funding: Federal funding cannot be used for abandonment or disposal of rest areas



Size/Usage

- Nine (9) of the remaining twenty-six (26) full service rest areas are expected to experience increases in patronage due to closures
- Average increase in patronage is expected to be less than 280,000 visitors per year
- The largest increase expected at the Onawa Southbound Rest Area



Spacing/Distance (30%)

- FHWA recommends rest area spacing not to exceed approximately one hour
- We assumed an hour driving distance equates to between 65 and 75 miles in length
- With the recommended closures, distances between only 3 (out of 34) segments of interstate between rest areas will exceed the FHWA recommended spacing



Spacing/Distance

- I-29 Northbound from 1st Northbound Missouri Rest Area (Dearborn, MO) to Pacific Junction – 135 miles (existing)
 - This portion of interstate already exceeds the recommended spacing, but has been in place since before this study began.
- I-35 Northbound Lamoni to Ankeny 92 miles
 - Even though this length exceeds the recommended spacing, the Des Moines metropolitan area provides additional ASLs between the two rest areas to compensate for the removal of the intermediate rest areas.
- I-35 Southbound Ankeny to Lamoni 92 miles
 - Even though this length exceeds the recommended spacing, the Des Moines metropolitan area provides additional ASLs between the two rest areas to compensate for the removal of the intermediate rest areas.



Truck Parking

- Truck parking with the closures would represent the largest service impact to the traveling public
- With the proposed closure of 11 full service rest areas and 16 parking only rest areas
 - Approx. 279 authorized truck parking spaces (approximately 35%) would be removed
 - 3 of the 11 full services sites < 94% utilized
 - Remaining rest areas are substantially over-utilized.

Truck Parking - Mitigation

- Truck Parking Availability Cameras in Operation
- Truck Parking Availability Application being developed (TPIMS) through a MAASTO Tiger grant
- Add Truck Parking to adjacent Rest Areas at the time of upgrade or replacement
- Alternative Service Locations (ASL's)
- Implement a targeted Oasis Program
- Automated Truck Technology



Truck Parking – ASL's

- There are approx. 60 ASLs that allow truck parking along Iowa interstate corridors that provide approximately 4,500 truck parking spaces.
- Approximately half of these ASLs were observed which accounted for approximately 4,000 truck parking spaces (nearly 90% of truck parking provided at ASLs)
- Truck parking at all observed ASLs was under 100% utilized, ranging between 75% and 95% utilized. This equated to approx. 600 additional truck parking spaces available at the observed ASLs

Truck Parking - Mitigation

TRUCK PARKING ACCOMMODATIONS

- With the closures of 11 full service rest areas and 16 parking only rest areas, approximately 279 authorized truck parking spaces (approximately 35%) throughout the system would be removed.
- Ten of the 16 parking only sites are less than 75% utilized and four of the 12 full service sites are less than 94% utilized.

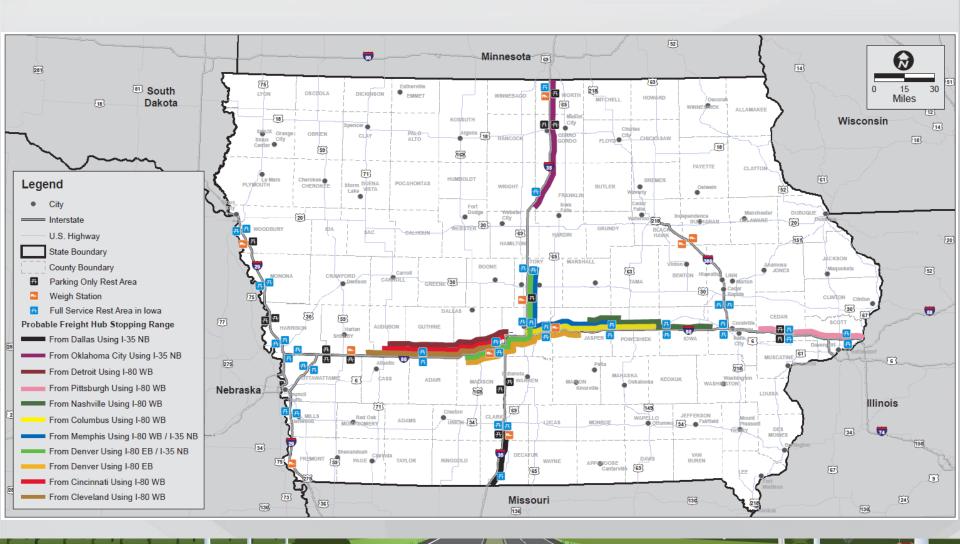


Truck parking accommodations the Department is pursuing include:

- Parking cameras and real time parking availability updates
- Augmenting truck parking at adjacent rest areas and weigh stations
- Interstate Oasis Program
- Public-Private Partnerships (P3)
- Automated vehicle technology



Freight Stopping Ranges



Input Needed

- Are there any specific closures that we should consider or reconsider....why?
- Are there specific locations outside of the overlap areas that we should consider adding more truck parking?
- Are there any rest areas where we should incorporate different truck parking design features for things like wind turbine loads?
- Is there any research into automated truck technology that you are aware of or would be willing to share?





Action Items

- Industry feedback FAC (today)
- Public input Online public meeting with a video we currently have in production (target Dec-Jan)
- Commission Input Proposed Informational Presentation
- Pause to gage success of implementation strategy





QUESTIONS ???

www.dot.iowa.gov\interstatestudy



BRAD HOFER

LOCATION ENGINEER / ASSISTANT OFFICE DIRECTOR OFFICE OF LOCATION & ENVIRONMENT

Brad.hofer@iowadot.us

Office: 515-239-1787



